

CLAIM AMENDMENTS

1. (Currently Amended) An optical switch comprising:
a film basically consisting of a polymer;
a keep plate having a switching through hole; and
driving means, wherein said film has an optical waveguide linearly extending therein and a notch ~~provided~~ extending across a switching portion ~~provided~~ located halfway in said optical waveguide, said keep plate holds said film to expose said switching portion ~~from~~ at said switching through hole, said driving means is employed for selecting a route of light by approximating and separating a gap of said notch, and said notch is formed by precedently forming a starting groove on ~~the~~ a surface of said film and pressing said switching portion with a pressing member from ~~the~~ a backside of said starting groove, while holding said film with said keep plate, thereby causing cleavage.
2. (Currently Amended) The optical switch according to claim 1, wherein said starting groove is located above ~~the~~ a center of said optical waveguide by a distance longer than half the mode field diameter of a beam propagated through said optical waveguide.
3. (Currently Amended) The optical switch according to claim 1, wherein the width of ~~the~~ an upper end of said starting groove is not more than 1 μm ~~on~~ at the deepest position of said starting groove.
4. (Currently Amended) The optical switch according to claim 1, wherein the bottom of said notch is arcuate as viewed from a side ~~portion~~, perpendicular to ~~the~~ a longitudinal direction of said film.
5. (Original) The optical switch according to claim 1, annealed after forming said notch by causing cleavage.
6. (Currently Amended) An optical switch comprising:
a film basically consisting of a polymer;
a keep plate having a switching through hole; and
driving means, wherein said film has an optical waveguide linearly extending therein and a notch ~~provided~~ extending across a switching portion ~~provided~~ located halfway in said optical waveguide, said keep plate holds said film to expose said switching portion ~~from~~ at said switching through hole, said driving means is employed for selecting a route of light by

approximating and separating a gap of said notch, said notch is formed by precedently forming a starting groove on ~~the~~ a surface of said film and pressing said switching portion with a pressing member from ~~the~~ a backside of said starting groove while holding said film with a cleavage keep plate having a cleavage through hole to expose said switching portion ~~from~~ at said cleavage through hole, thereby causing cleavage, and

the width of said cleavage through hole in a direction perpendicular to said notch is larger than the width of said switching through hole in the direction perpendicular to said notch.

7. (Currently Amended) A method of manufacturing an optical switch including ~~a step of~~ holding a film basically consisting of a polymer and having an optical waveguide linearly extending therein with a keep ~~plat~~ plate having a switching through hole, and pressing a starting groove ~~provided~~ located on a surface portion of said film corresponding to a switching portion ~~provided~~ located halfway in said optical waveguide with a pressing member from the backside through said switching through hole, thereby causing cleavage for forming a notch across said switching portion from said starting groove.

8. (Currently Amended) The method of manufacturing an optical switch according to claim 7, ~~wherein said pressing member including alternately repeats a state of and repeatedly~~ pressing said film and ~~a state of~~ not pressing said film with said pressing member for fatiguing said film in ~~said step of~~ causing cleavage.

9. (Currently Amended) The method of manufacturing an optical switch according to claim 8, ~~wherein including reciprocating~~ said pressing member ~~reciprocates~~ at a first stroke until said starting groove causes a crack and gradually ~~increases~~ increasing the stroke after said starting groove causes said crack.

10. (Currently Amended) The method of manufacturing an optical switch according to claim 7, ~~wherein said including pressing member presses~~ said starting groove ~~on~~ with said pressing member at two points holding said optical waveguide therebetween.

11. (Currently Amended) The method of manufacturing an optical switch according to claim 7, ~~carrying out said step of including~~ causing cleavage while monitoring optical characteristics related to a pressed point.

12. (Currently Amended) The method of manufacturing an optical switch according to claim 7, further including ~~a step of~~ crushing said switching portion from a surface portion ~~provided with~~ including said notch, after forming said notch through ~~said step of~~ causing cleavage.

13. (Currently Amended) The method of manufacturing an optical switch according to claim 12, ~~carrying out said step of~~ including crushing said switching portion with a load substantially equal to a load necessary for said film to start plastic deformation.